



## Typification of names published by Joseph Franz Freyn from eastern Turkey

KAREL SUTORÝ

Department of Botany, Moravian Museum, Hviezdoslavova 29a, CZ 627 00 Brno, Czech Republic, [ksutory@mzm.cz](mailto:ksutory@mzm.cz)

### Abstract

In total 25 names were published by Joseph Franz Freyn based on collections by Anton Kronenburg originating from the surroundings of Lake Van (eastern Turkey). Only two of them are in current use, all the other ones are considered synonyms. For 19 names lectotypes are selected, three were already designated elsewhere, for two names possible holotypes are indicated.

**Key words:** Anton Kronenburg, *Aethionema*, *Allium*, *Delphinium*, *Fritillaria*, *Grammosciadium*, *Haplophyllum*, *Hedysarum*, *Helichrysum*, *Nepeta*, *Onosma*, *Orchis*, *Phaeopappus*, *Ranunculus*, *Salvia*, *Scorzonera*, *Scrophularia*, *Swertia*, *Teucrium*, *Tulipa*, *Valeriana*

### Introduction

Cornelis Gerrit van Tubergen (23 Feb 1845–25 Jan 1919) was owner of the “Zwanenburg nurseries” in Haarlem, Holland. His company was oriented on the collection, cultivation and distribution of “bulbous and tuberous” ornamental plants. At the end of 1897 he recruited Anton Kronenburg to collect plants for him. Kronenburg was of German origin, born in Koblenz, Germany (but with an Austrian passport), and had already lived 20 years in Palestine when he was engaged by van Tubergen. Kronenburg undertook altogether four collecting trips (Eastern Turkey 1899, Caucasus 1901–1902, Tadjikistan 1903, Alai-Pamir 1904) (Van Tubergen 1947, J.A.C. Hoog in litt.). Van Tubergen used the material collected during Kronenburg’s expedition to eastern Turkey in the year 1899 to create five, probably not entirely identical exsiccate series. One of these series was sent to Joseph Franz Freyn (7 Dec 1845–16 Jan 1903), who used this material to describe 25 new taxa (Freyn 1900, 1901). The material was added to Freyn’s herbarium, which was deposited in today’s Moravian Museum in the year 1905. As far as we know, the specimens from this collecting trip are only preserved in Brno (BRNM), Jena (JE), and Vienna (WU). The material housed in Brno and Jena is provided with provisional collectors’ labels. The transcribed labels by Freyn and occasional smaller envelopes testifying Freyn’s handling with the herbarium specimens are only found in Brno. On the contrary, the labels of the specimens housed in Vienna have been replaced with transcribed labels following Freyn’s identifications. Apparently, the material in Freyn’s collection in BRNM has priority in the selection of lectotypes because only this material provides certainty that it was used for the descriptions.

### Material & methods

Acronyms of herbaria are given according to Thiers (2015). Names currently in use are in bold and their nomenclature according to the various volumes of Davis’s Flora of Turkey and the East Aegean Islands (Huber-Morath 1978, Lall & Mill 1978, Ekim 1982, Hedge 1982, Kollman 1984, Renz & Taubenheim 1984, Rix 1984), Güner & al. (2012), and/or according to recent identification labels on discussed specimens.

Kronenburg used the abbreviation “inclv.” for inclusive. He did not use German grammar properly; some letters should have been written in capitals but are not. Freyn consequently added the collector as “com. C.G. van Tubergen jun.” on his transcribed labels.